SOUND IDEA!

DCC sound is an exciting and engaging development for the hobby that adds a new dimension to operating model railways and puts you firmly in the driving seat, as **MARK CHIVERS** explains.

UNTIL YOU HAVE tried Digital Command Control (DCC) sound models for yourself, it is difficult to appreciate just how much it can improve your enjoyment of the hobby. Once you have experienced a good quality digital sound setup, you will find it increasingly difficult to go back to 'quiet' locomotive running.

DCC sound offers the ultimate model railway driving experience as you also get to savour authentic engine sounds as you control the regulator of your model. Effectively, as you increase and decrease the speed steps on your controller throttle, the engine sounds change accordingly as if you are driving the real thing. By selecting the function buttons on your digital controller, you can choose whistles/horns, coupling sounds, coal shovelling, cylinder drain cocks, buffering up sounds, flange squeal and more. For added realism, some diesel locomotive projects also include cold or multi-start options.

Modellers have been utilising prototypical sound for their layouts for many years, but before DCC sound, this would usually involve hi-fi style speakers installed beneath the baseboard and audio soundtracks played separately. However, new technology has since enabled realistic audio files to be loaded directly to a locomotive's onboard decoder. As this technology has evolved, so too has the available capacity and subsequent audio reproduction.

In the UK, pioneers of DCC sound began to release aftermarket decoder projects with British sounds in the early 2000s, offering the prospect of UK outline models with authentic prototypical audio. Since those formative years, an ever expanding selection of digital sound developers has appeared.

Digital sound decoders differ from standard motor examples in that they enable a completed audio project to be uploaded to the decoder and, in conjunction with a suitable speaker, a series of authentic sounds to play according to the model's speed.

Over time, DCC sound projects have become increasingly more sophisticated and offer a great deal more functionality than ever before. You can fine-tune the decoders to suit your individual requirements by simply tweaking individual Configuration Variables (CVs). Top end decoders allow you to change most settings. While many of the earlier projects were perfectly adequate, you may have felt as though you were driving the locomotive to the sounds rather than the audio reflecting your driving technique. Today, projects usually include documentation with hints and tips explaining how to get the best out of your chosen decoder's abilities.

Obtaining digital sound decoders has never been simpler with a wide selection of producers offering their projects on various platforms such as ESU LokSound, ZIMO, SoundTraxx and, more recently, Doehler and Haass. Prices are typically £90-£120 for the decoder loaded with a UK sound project. Digital specialists offering bespoke UK steam, diesel and electric locomotive sound projects include Coastal DCC, DC Kits, Digitrains, Howes, Locomansounds, Olivia's Trains, South West Digital and more. If you just want your sound decoder overwritten with a new sound file, this will typically cost around £15-£25.

If price is an issue, Hornby has also launched its own alternative brand of digital sound decoders – Twin Track Sound (TTS). These are typically a third of the price of the top end sound decoders but, as you might expect, they have less functionality. While a typical top end ESU LokSound 5 decoder will allow you to play up to ten sounds simultaneously, the Hornby TTS decoder is limited to two sounds (engine plus one other) at the same time - hence Twin Track Sound – and they cannot be overwritten with an alternative sound project. That said, in many circumstances this is perfectly adequate, and they offer up to 26 different functions with a full suite of sounds. The TTS diesel decoders are particularly good.

Having considered some of the different sounds and decoders, the next element to consider is the speaker. Audio output is only as good as the quality of the speaker. Most speakers supplied with the sound decoder are of a good standard, but there are many different types of speaker available which really can enhance the sound output to such an extent that you can hear sounds that are 'lost' with the originally supplied example. Whatever your requirements, a growing collection of suitable speakers in all shapes and sizes are now available. It is surprising how much difference the right speaker can make.

However you start, and wherever your DCC sound journey takes you, it opens up a wealth of possibilities, makes operating your layout more fun – and adds that crucial sense that's been missing for too long. We're sure that when you start, you'll be hooked. ■

The world of digital sound brings a new dimension to model railway operation. A sound-fitted 'Super D' 0-8-0, with characteristic wheeze, leads a ballast train round the curve on Topley Dale. Hear it online at *KeyModelWorld.com*.

USEFUL LINKS	
Coastal DCC	*www.coastaldcc.co.uk*
DCC Concepts	*www.dccconcepts.com*
DCC Supplies	*www.dccsupplies.com*
DCC Train Automation	*www.dcctrainautomation.co.uk*
Digitrains	*www.digitrains.co.uk*
Doehler and Haass	*www.doehler-haass.de*
ESU	*www.esu.eu*
Gaugemaster	*www.gaugemasterretail.com*
Hornby	*www.hornby.com*
Howes Models	*www.howesmodels.co.uk*
Legomanbiffo/DC Kits	*www.dckits-devideos.co.uk*
Locomansounds	*www.locomansounds.com*
Mark's Trains	*www.marks-trains.co.uk*
Mr Soundguy	*www.mrsoundguy.co.uk*
Olivia's Trains	*www.oliviastrains.com*
Rail Exclusive	*www.railexclusive.com*
Roads and Rails	*www.roads-and-rails.co.uk*
Soundtraxx	*www.soundtraxx.com*
South West Digital	*www.southwestdigital.co.uk*
Wheeltappers	*www.wheeltappersdccsounds.co.uk*
Wickness Models	*www.wicknessmodels.co.uk*
YouChoos	*www.youchoos.co.uk*
ZIMO (UK)	*www.zimo-digital.co.uk*